

## REMARKS

Applicants have amended page 17 of the disclosure by moving the passage "generally in amounts from about 0.5 to 16, preferably from 2 to 13" from lines 12 and 13 to line 6 following "0 up to 20" and before "weight %". Also Applicants have inserted --most preferably from 8 to 13-- following the above noted passage. It is respectfully submitted the amendment adds no new subject matter to the specification in view of the passage originally appearing at page 17 lines 12 to 14. Further the amendments are supported by original claims 21, 25, 27, 50, 51, 53, 54, 56 and 57. Additionally, it is respectfully submitted the amendment will necessitate no further search on the part of the examiner. It is respectfully submitted the amendment is in good order for entry into the specification and the same is respectfully solicited.

The examiner rejected claim 17 as there was not support in the disclosure for the weight % at line 2. Applicants respectfully traverse the examiner's rejection. Particularly, applicants note the passage in the disclosure at page 14 lines 30 to 35 teach the preferred amount of titanium being "from 0.25 to 0.70 weight % based on the final weight of the catalyst (inclusive of the support)". It is respectfully submitted that claim 17 is supported by the disclosure as originally filed.

The examiner rejected claims 21, 25, 27, 50, 51, 53, 54, 56, and 57 as not being supported by the specification as originally filed. It is respectfully submitted that revised page 17 of the disclosure supports these claims.

The examiner has rejected the claims on file pursuant to 35 U.S.C. §102 or 35 U.S.C. §103 in view of EP 0 595 574 to Berardi et al., and particularly examples 12(b) and 13.

There is nothing in the disclosure portion of the Berardi et al. patent which teaches adding the co-catalyst at a rate to provide from 10 to 50 ppm of aluminum based on the production rate.

As noted by the examiner example 12(b) fails to teach a production rate so there is no teaching on the rate of aluminum addition relative to the production rate.

As noted by the examiner one of the features of the claims presently under consideration is that the ratio of aluminum from both the catalyst and co-catalyst to titanium is greater than 25:1.

In example 12(b) the ratio of Al from the catalyst and co-catalyst to Ti is 12:6 (12 millimoles of TEAL and 3 moles of titanium tetra-n butoxide and 3 moles of  $TiCl_4$  in the catalyst per se and a ratio of Al:Ti of 35:0.33 in the reactor. Accordingly the ratio of total Al:Ti in example 12(b) is 47:6.33 or about 9:1. This is not close or even slightly lower than the requirement of the claims presently under consideration.

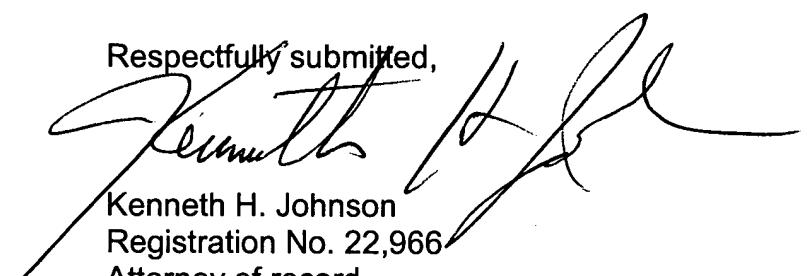
In example 13 the ratio of aluminum to titanium in the catalyst per se is 8:2 or 4:1. The ratio of Al:Ti in the reactor is  $24:(2 \times 10^3)$  (mmoles of Ti in the pre polymer)  $\times 120$  g of pre-polymer feed  $/80,000$  (total pre-polymer produced with 2 mmoles of Ti) or 24:3 (8:1). The total ratio is 12:1 or about half the ratio required in the claims presently under consideration.

The requirements for a prior reference to sustain a rejection pursuant to 35 U.S.C. §102 have been judicially considered in Kahman v. Kimberly - Clark Corp. 218 USPQ 781 (Fed. Cir. 1984) and Leinoff v. Louis Milona & Sons, Inc. 220 USPQ 845 (Fed. Cir. 1984). The courts have held that to sustain a rejection pursuant to 35 U.S.C. §102 each reference individually must identically disclose all the elements of the claim sought to be rejected. It is respectfully submitted that given the significantly different ratio of Al:Ti in the teaching of examples 12(b) and 13 that neither example meets the above noted test. Accordingly, it is respectfully submitted the claims presently under consideration are novel over the applied reference.

In example 13 the ratio of Al:Ti is about half that required by the claims presently under consideration. The examiner has taken the position the there is a case of *prima facie* obviousness where the claimed ranges and the prior art ranges do not overlap but are close enough that one skilled in the art would expect them to have the same properties. Applicants respectfully traverse the Examiner. The Titanium case related to trying to patent a new property for an existing composition (7 USPQ 2d page 1133 right column last third). The issue was ultimately whether the polymer was new (no matter how it was characterized). The ranges in the claims under consideration and Berardi et al. are not close enough so that one of ordinary skill in the art would expect the catalysts to have the same properties. This is not the case of a minor change in the amount of aluminum but rather an increase in the amount of aluminum to titanium by 50% (i.e. Berardi et al. teaches lower ratios of Al:Ti). It is respectfully submitted that given the test in Graham v. John Deere 148 USPQ 459 one of

ordinary skill in the art if following Berardi et al. would not increase the ratio of Aluminum to Ti in Berardi et al. to obtain the subject matter of the present invention. Additionally, the examiner's premise is one of ordinary skill in the art would seek to reduce the amount of aluminum, not to increase it (to the levels required by the present invention). It is respectively submitted the claims presently under consideration define inventive subject matter.

Respectfully submitted,



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